

Post Rock Extension District Column

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Crop Production Agent

“Timely silage harvest is important and also remember safety guidelines!”

Since we have been blessed with abundant moisture throughout much of north central Kansas, many of our crops are looking great including crops that will be made into silage for livestock. Now that August is here it soon will be a time where producers will be busy with silage harvest.

Corn and sorghum development and maturity in north central Kansas is highly variable this year due to the many different planting dates. So the million dollar question.....Does harvest timing really make a difference? Harvest timing is critical for high quality silage and needs to be based on the moisture content. Silage chopped too early and wetter than 70% moisture can run or seep and it often produces a sour, less palatable fermentation. Conversely, dry silage is difficult to pack adequately to ensure the proper ensiling process. When the silage is too dry at the time of harvest, it can heat, energy and protein digestibility may decline, and spoilage generally increases. If your silage usually steams during winter, it could have been too dry when chopped as well. Many corn hybrids are 60% to 65% moisture after kernels dent and it reaches one-half to three-quarters milk-line. This stage of development may not fit all hybrids, so it is important to remember to check each field. Research at K-State Research and Extension has shown that harvesting sorghums in the mid-to late dough stage of kernel development optimizes both silage yield and nutritive value. It's also important to know that sorghum kernels, like corn, become increasingly hard and less digestible as the plant matures. Generally, it is more difficult to judge proper plant moisture based on grain stage of maturity with sorghum silage than corn. A good way to handle the timing of sorghum silage is to begin cutting when 80% or more of the heading has occurred and 50% of the grain reaches the soft-dough stage. It may be tempting to delay harvest while waiting for whole-plant moisture levels to drop, but that is usually not recommended. Any advantage gained by the lower moisture content will be offset by less digestible grain. In fact, it's generally recommended to harvest your sorghum silage a little earlier rather than a little late. On average, once the milk-line begins to move, corn silage dries down at a rate of 0.5% to 0.6% per day, however, sorghum is a little bit slower. Dry down is entirely dependent on the weather as rain and cool temperatures can slow the progress while hot, dry weather may increase dry down as much as 1% per day. While there is no clear, consistent way to predict when inoculants will be most effective, typically, inoculation hastens the fermentation process, reduces face spoilage and can save you about 5% in storage losses. Inoculants consistently improve wet silage, especially sorghums. If you start chopping early enough to prevent silage from being too dry at the end, inoculants should help. By taking all of this into consideration and chopping your silage at the proper time, the outcome will be higher quality feed and higher profits.

It is also important to remember that safety is a must when it comes to silage harvest according to K-State

Research and Extension beef cattle specialist, Justin Waggoner. He encourages farmers and feed yards to keep safety at the top of the list ... and to remind others involved to do the same.

Silage operations is one of the most fast-paced operations of the year with so many different jobs that are involved including cutters and choppers in the field, multiple trucks running up and down the road from the field to the pile or bunker along with two or three pack tractors working.

Combining heavy equipment with speed and long hours makes harvesting and putting up silage that could be a recipe for accident accidents to happen. Plus, there could be additional employees that they may not be familiar with the farm or even the area.

“Repetitive operations tend to keep people from being aware of the situation around them,” stressed Waggoner, noting that the monotony of silage harvest can result in complacency, but urged those involved to practice situational awareness.

In addition, other distractions such as fatigue or cell phone use can also cause unpredicted accidents that can also be detrimental to the operation.

Waggoner also pointed out that this time of year when trucks are going up and down roads and crops are tall, visibility is sometimes limited, noting that some accidents are tied back to silage harvest operations.

Often there are people on foot working around silage piles or bunkers. If that’s the case, make drivers aware of that and encourage those on foot to wear safety vests for greater visibility.

Waggoner warned against piling silage over and above the wall in a bunker. “As a nutritionist, silage piled above the wall doesn’t get packed very well, so it doesn’t make good silage,” he said. “Plus, the edge of an overfilled bunker increases the chance of rollover when packing and is more prone to collapse. So from a safety and quality perspective, it’s best not to overfill bunkers.”

Finally, Waggoner discourages piling silage too high in drive-over piles, noting that if too high, the tops are inaccessible to equipment. In those cases, consider a second pile.

If you have further questions on silage management and safety, give me a call at any of our Post Rock Extension District Offices in Beloit, Lincoln, Mankato, Osborne or Smith Center.

Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Mitchell, Osborne, and Smith counties. Sandra may be contacted at swick@ksu.edu or by calling Smith Center, 282-6823, Beloit 738-3597, Lincoln 524-4432, Mankato 378-3174, or Osborne 346-2521. Join us on Facebook at “Post Rock Extension” along with our blog site at “postrockextension.blogspot.com. Also remember our website is www.postrock.ksu.edu and my twitter account is @PRDcrops.